



Gene Therapies for Duchenne Muscular Dystrophy

The Abigail Wexner Research Institute at Nationwide Children's Hospital

Name: Sonia Hamilton
Undergraduate Research
STEP Faculty: Deepak Gulati
Major: Neuroscience

Dates: May 1st – July 31st 2019

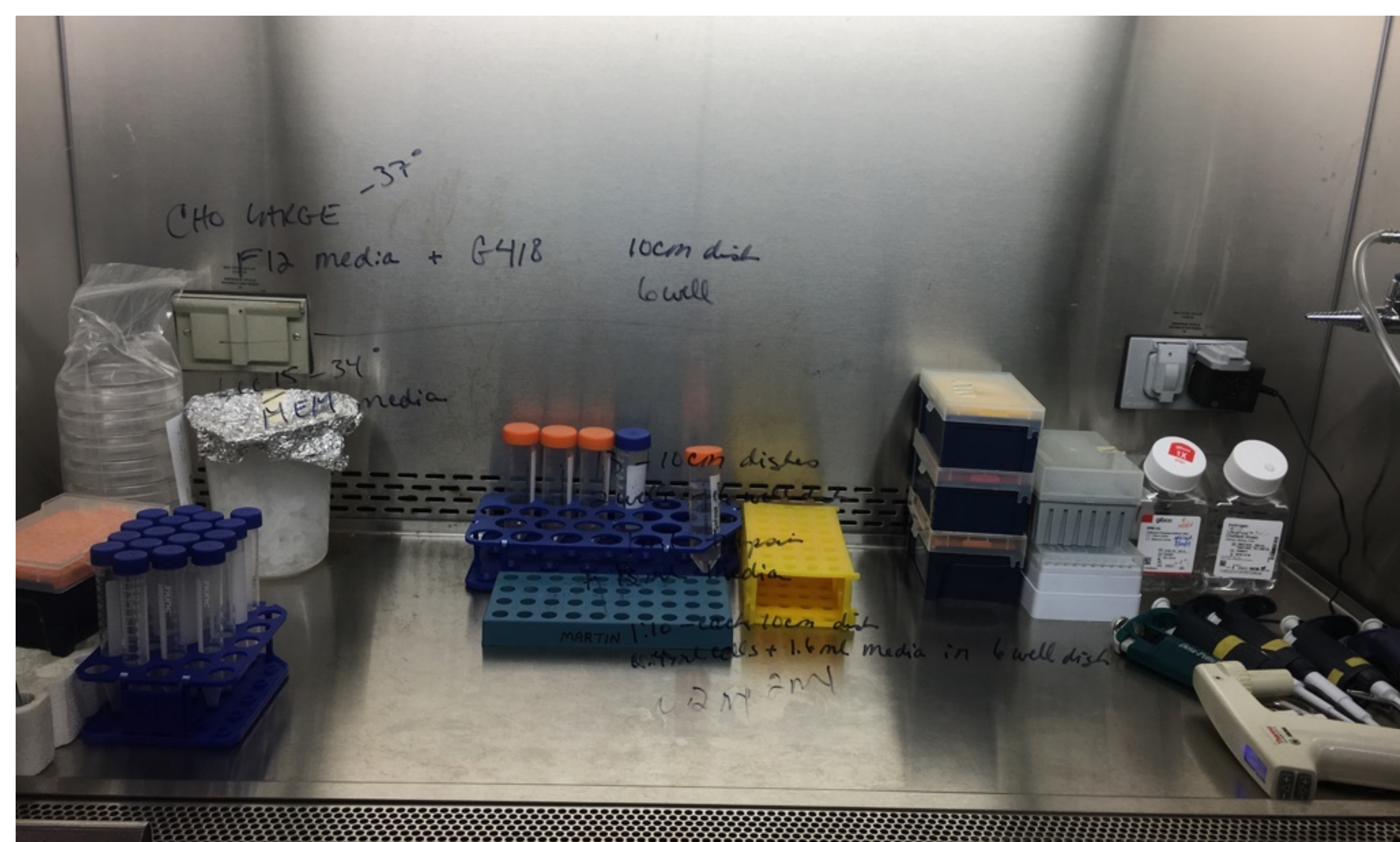
Biggest parts of budget: rent and utilities, food expenses, transportation

Learning Outcomes

Trained and practiced multiple laboratory techniques, such as PCR, cell culture, and staining. Working in a lab full time, collaborating with colleagues.

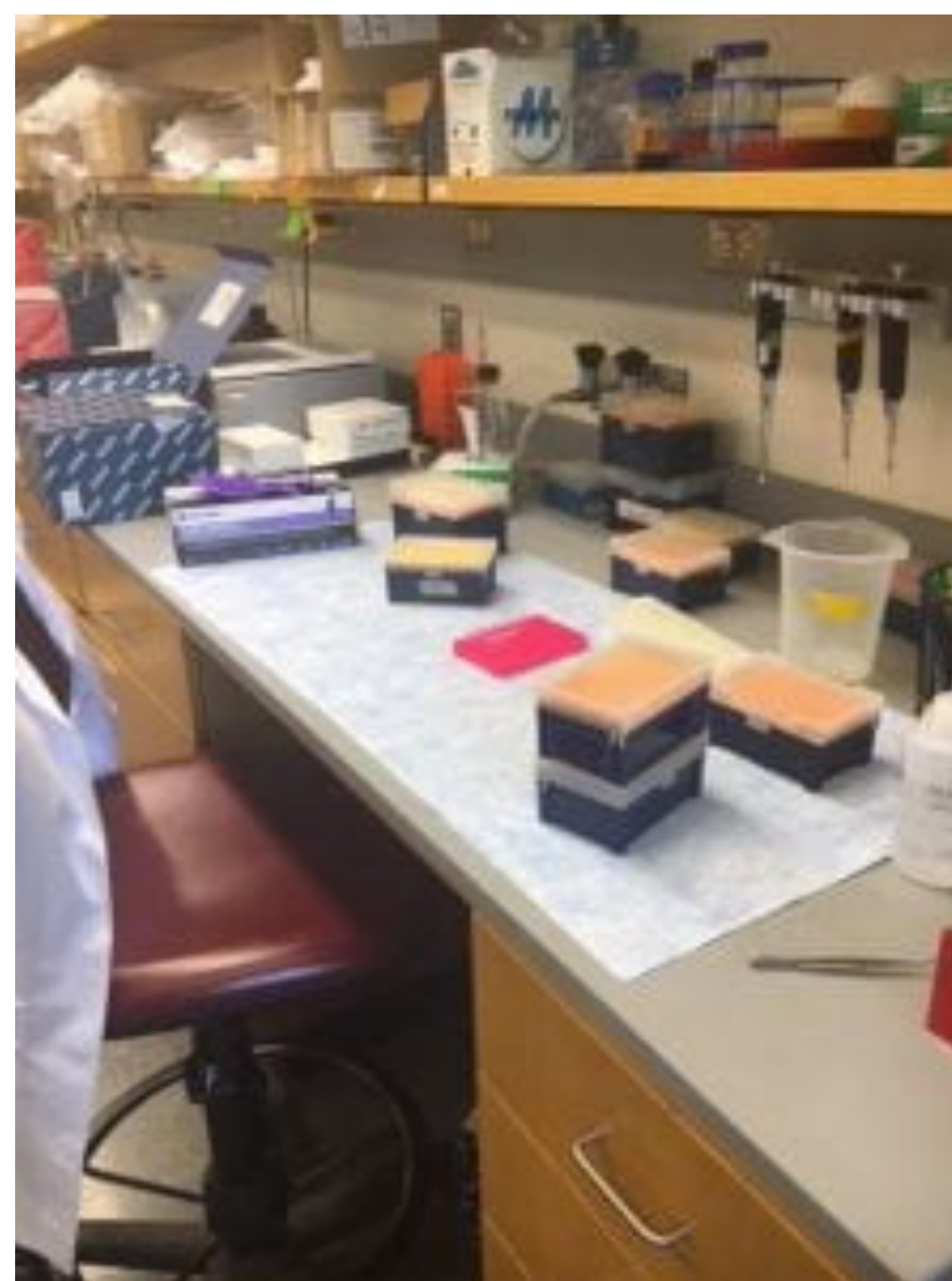
Learning the difficulties and frustrations of working in a laboratory setting, and how to handle failure.

Reflecting on whether to pursue research in my future.



Description

I spent the summer doing research in Dr. Paul Martin's lab in the Center for Gene Therapy. While I worked on multiple projects, I spend most of my time on our canine gene therapy for Duchenne Muscular Dystrophy.



Highlights

The environment at Nationwide Children's Hospital itself was so important for my summer! I was able to attend talks by many different researchers at the Research Institute as well as by physicians at weekly Pediatric Grand Rounds. I was also able to shadow a physician at the Neuromuscular Clinic.

Molecular Therapy
Methods & Clinical Development
Original Article



rAAVrh74.MCK.GALGT2 Demonstrates Safety and Widespread Muscle Glycosylation after Intravenous Delivery in C57BL/6J Mice

Deborah A. Zygmunt,^{1,6} Rui Xu,^{1,6,7} Ying Jia,¹ Anna Ashbrook,^{1,2} Chelsea Menke,² Guohong Shao,¹ Jung Hae Yoon,^{1,8} Sonia Hamilton,¹ Harshan Pisharath,³ Brad Bolon,⁴ and Paul T. Martin^{1,5}



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